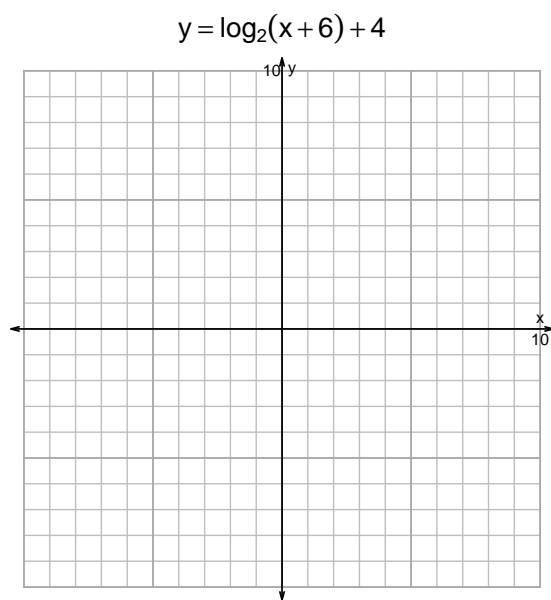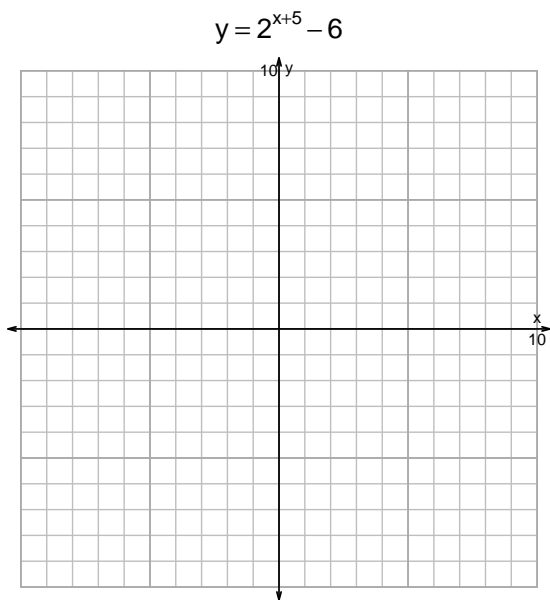Name: _____   Date: _____
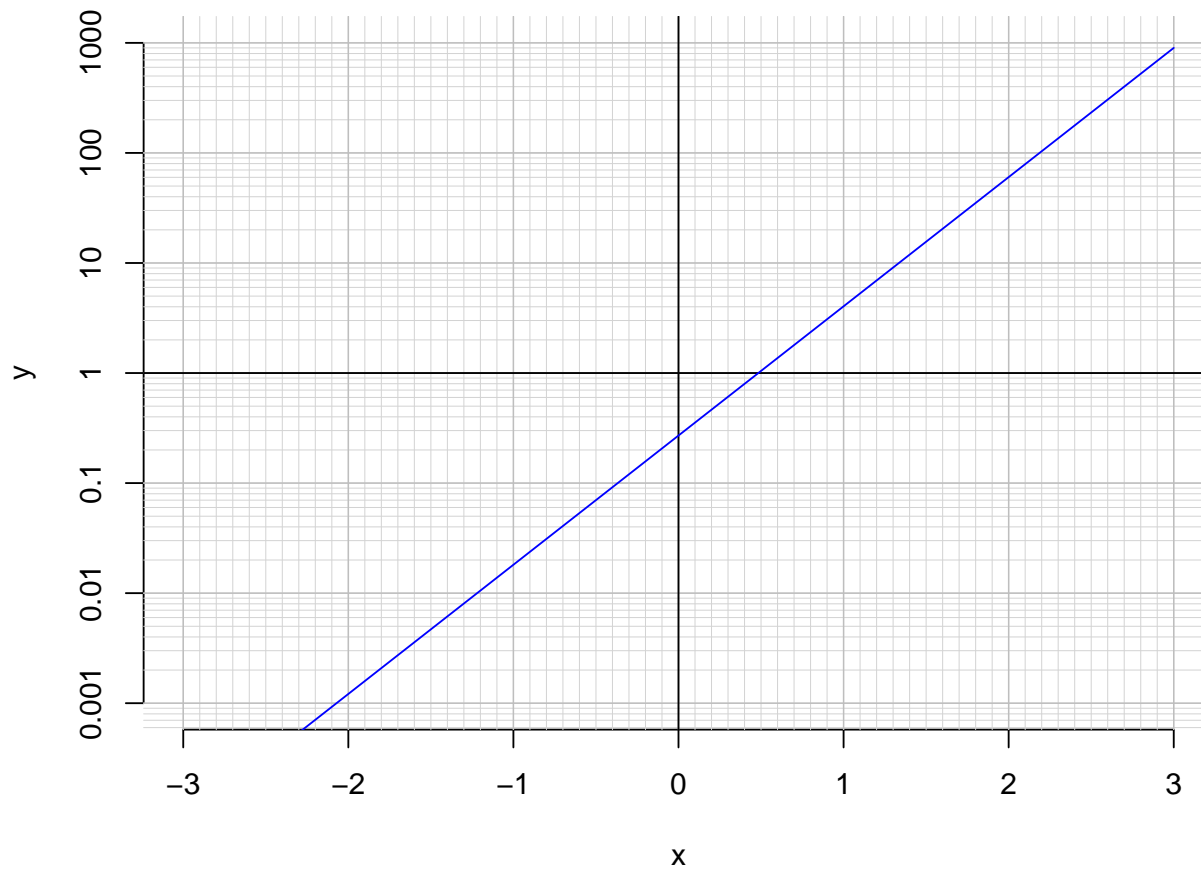
s18QUIZ: EXP LOG (QUIZ v261)

1. Graph $y = 2^{x+5} - 6$ and $y = \log_2(x + 6) + 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x+5} - 6$$

$$y = \log_2(x + 6) + 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-13 = \left(\frac{-3}{4}\right) \cdot 2^{-7t/5}$$

3. An exponential function $f(x) = 0.27 \cdot e^{2.7x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-0.5)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(400)$.